

Abstract

A measuring device, a measuring method, and an evaluating device for easily and accurately obtaining information suitable to evaluate, for example, the discharge characteristic of an insulating film such as an MgO protective layer of a plasma display are provided. An MgO film surface, a sample to be measured, is irradiated with electrons or ions emitted from an electron gun (130) or an ion gun (140). The energy distribution of the secondary electrons emitted from the sample is measured by an electron spectrograph (150), and the spectrum data on the measured secondary electrons is supplied to an analyzing device (200). The analyzing device (200) analyzes the spectrum data and determines information (evaluation values) to evaluate the properties of the sample to be measured.